

### Abstract

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E<sub>2</sub> The production of carotenoid is accomplished using a DNA molecule that encodes a polypeptide as obtained from *Haematococcus pluvialis*, *Phaffia rhodozyma*, or *Saccharomyces cerevisiae*, having isopentenyl pyrophosphate (IPP) isomerase activity, or DNA molecule having a nucleotide sequence that hybridizes thereto. In particular, one can introduce such a DNA molecule into a carotenoid-producing microorganism, culture the microorganism thus transformed, and then obtain carotenoids in the culture broth and cells.

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